# 1. Identification

## Product identifier

**VITASIL**

## Recommended use of the chemical and restrictions on use

**Use of the substance/mixture**

- Use as laboratory reagent

## Details of the supplier of the safety data sheet

- **Company name:** VITA Zahnfabrik H.Rauter GmbH & Co.KG
- **Post-office box:** 1338
- **79704 Bad Säckingen**
- **Telephone:** +49(0)7761-562-0
- **Telefax:** +49(0)7761-562-299
- **e-mail:** info@vita-zahnfabrik.com
- **Internet:** www.vita-zahnfabrik.com

## Emergency phone number:

- +49-(0)761-19240

## Further Information

- **medical device**

# 2. Hazard(s) identification

## Classification of the chemical

**29 CFR Part 1910.1200**

- Flammable liquids: Flam. Liq. 2
- Serious eye damage/eye irritation: Eye Irrit. 2A

## Label elements

**29 CFR Part 1910.1200**

- **Signal word:** Danger

- **Pictograms:**

## Hazard statements

- Highly flammable liquid and vapor
- Causes serious eye irritation

## Precautionary statements

- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Keep container tightly closed.
- Wear protective gloves/protective clothing/eye protection/face protection.
- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.

## Hazards not otherwise classified

- No information available.

# 3. Composition/information on ingredients

## Mixtures
Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5</td>
<td>ethyl alcohol</td>
<td>49.5 %</td>
</tr>
</tbody>
</table>

4. First-aid measures

Description of first aid measures

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink plenty of water.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Water spray jet, Carbon dioxide (CO2), Foam, Extinguishing powder.

Specific hazards arising from the chemical

Highly flammable. Vapors may form explosive mixtures with air.

Special protective equipment and precautions for fire-fighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray/stream to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Do not breathe gas/fume/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion.

Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Reference to other sections

Safe handling: see section 7
Personal protection equipment (PPE): see section 8
Disposal: see section 13

7. Handling and storage

Advice on safe handling

No special measures are necessary.
Advice on protection against fire and explosion
Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapors may form explosive mixtures with air.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage
Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

8. Exposure controls/personal protection

Control parameters

Exposure limits

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>f/cc</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5</td>
<td>Ethyl alcohol (Ethanol)</td>
<td>1000</td>
<td>1900</td>
<td></td>
<td>TWA (8 h)</td>
<td>PEL</td>
</tr>
<tr>
<td>64-17-5</td>
<td>Ethyl alcohol</td>
<td>1000</td>
<td>1900</td>
<td></td>
<td>TWA (8 h)</td>
<td>REL</td>
</tr>
</tbody>
</table>

Exposure controls

Protective and hygiene measures
Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection
Suitable eye protection: goggles.

Hand protection
When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Recommended glove articles KCL Dermatril P NBR (Nitrile rubber) 30 min Breakthrough time (maximum wearing time)

Skin protection
Flame-retardant protective clothing. Wear anti-static footwear and clothing

Respiratory protection
In case of inadequate ventilation wear respiratory protection. Technical ventilation of workplace

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: Liquid
Color: colorless
Odor: characteristic
pH-Value: not determined

Changes in the physical state
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/freezing point</td>
<td>not determined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>78 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>15 °C</td>
</tr>
<tr>
<td><strong>Flammability</strong></td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td>not applicable</td>
</tr>
<tr>
<td>Gas</td>
<td>not applicable</td>
</tr>
<tr>
<td>Lower explosion limits</td>
<td>3.5 vol. %</td>
</tr>
<tr>
<td>Upper explosion limits</td>
<td>15 vol. %</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>425 °C</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td>not applicable</td>
</tr>
<tr>
<td>Gas</td>
<td>not applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>not determined</td>
</tr>
<tr>
<td><strong>Oxidizing properties</strong></td>
<td></td>
</tr>
<tr>
<td>Not oxidising</td>
<td></td>
</tr>
<tr>
<td><strong>Solubility in other solvents</strong></td>
<td></td>
</tr>
<tr>
<td>not determined</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapor density</td>
<td>not determined</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>not determined</td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td></td>
</tr>
<tr>
<td>Solid content</td>
<td>0.0 %</td>
</tr>
</tbody>
</table>

### 10. Stability and reactivity

**Reactivity**
- Highly flammable.

**Chemical stability**
- The product is stable under storage at normal ambient temperatures.

**Possibility of hazardous reactions**
- No known hazardous reactions.

**Conditions to avoid**
- Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapors may form explosive mixtures with air.

**Incompatible materials**
- No information available.

**Hazardous decomposition products**
- No known hazardous decomposition products.

### 11. Toxicological information

**Information on toxicological effects**

**Acute toxicity**
- Based on available data, the classification criteria are not met.
Irritation and corrosivity
- Causes serious eye irritation
- Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitizing effects
- Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction
- Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - single exposure
- Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - repeated exposure
- Based on available data, the classification criteria are not met.

Carcinogenicity (OSHA): No ingredient of this mixture is listed.
Carcinogenicity (IARC): Ethanol in alcoholic beverages (CAS 64-17-5) is listed in group 1.
Carcinogenicity (NTP): No ingredient of this mixture is listed.

Aspiration hazard
- Based on available data, the classification criteria are not met.

Additional information on tests
- The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

12. Ecological information

Ecotoxicity
- The product is not: Ecotoxic.

Persistence and degradability
- The product has not been tested.

Bioaccumulative potential
- The product has not been tested.

Mobility in soil
- The product has not been tested.

Other adverse effects
- No information available.

Further information
- Avoid release to the environment.

13. Disposal considerations

Waste treatment methods
Disposal recommendations
- Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Contaminated packaging
- Wash with plenty of water. Completely emptied packages can be recycled.

14. Transport information

Marine transport (IMDG)
Safety Data Sheet
according to 29 CFR 1910.1200(g)

VITASIL
Revision date: 15.08.2019 Product code: 002 Page 6 of 7

<table>
<thead>
<tr>
<th>UN number:</th>
<th>UN 1170</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name:</td>
<td>ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)</td>
</tr>
<tr>
<td>Transport hazard class(es):</td>
<td>3</td>
</tr>
<tr>
<td>Packing group:</td>
<td>II</td>
</tr>
<tr>
<td>Hazard label:</td>
<td>3</td>
</tr>
</tbody>
</table>

Special Provisions: 144
Limited quantity: 1 L
Excepted quantity: E2
EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

<table>
<thead>
<tr>
<th>UN number:</th>
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</tr>
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</table>

Special Provisions: A3 A58 A180
Limited quantity Passenger: 1 L
Passenger LQ: Y341
Excepted quantity: E2

IATA-packing instructions - Passenger: 353
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 364
IATA-max. quantity - Cargo: 60 L

Environmental hazards
ENVIRONMENTALLY HAZARDOUS: no

Special precautions for user
Warning: Combustible liquid.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not applicable

15. Regulatory information

U.S. Regulations
National regulatory information
SARA Section 311/312 Hazards: ethyl alcohol (64-17-5): Fire hazard, Immediate (acute) health hazard

State Regulations
Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)
This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other information
## Abbreviations and acronyms

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service
- LC50: Lethal concentration, 50%
- LD50: Lethal dose, 50%

## Other data

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)